

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO	$\cdot \Box$	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/814,416		03/31/2004	Goichi Katayama	FS.20132US0A	5739	
20995	759	0 08/26/2005		EXAMINER		
		RTENS OLSON &	BASINGER, SHERMAN D			
2040 MAII FOURTEE			ART UNIT	PAPER NUMBER		
IRVINE, (CA 9	2614	3617			
				DATE MAILED: 08/26/200	5	

Please find below and/or attached an Office communication concerning this application or proceeding.

N							
•	Application No.	Applicant(s)					
Office Action Summer	10/814,416	KATAYAMA, GOICHI					
Office Action Summary	Examiner	Art Unit					
The MANUALC DATE of this communication and	Sherman D. Basinger	3617					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. O (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on 16 Au	1) Responsive to communication(s) filed on <i>16 August 2005</i> .						
2a) ☐ This action is FINAL . 2b) ☒ This	•						
	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims							
4) ☐ Claim(s) 1-13 and 15-28 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-13 and 15-28 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or election requirement.							
Application Papers							
9) ☐ The specification is objected to by the Examiner. 10) ☑ The drawing(s) filed on 28 February 2005 is/are: a) ☑ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. § 119							
12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.							
Attachment(s)							
1) Notice of References Cited (PTO-892)	4) Interview Summary	(PTO-413)					
Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other:	te atent Application (PTO-152)					

DETAILED ACTION

Claim Objections

1. Claim 27 is objected to because of the following informalities: see below.

Appropriate correction is required.

In claim 27 the following terms have no clear antecedent: the first duct; the first airflow space; the cavity; the bottom opening of the first duct; the elongated body of the second duct; the bottom opening of the second duct; and the upper opening of the second duct. It appears that claim 27 should not have depended from claim 12.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Takahashi et al.

The engine is 22, the top cowling member is 30, the bottom cowling member is 28, the engine air intake device is surge tank 76, the external wall portion is the outer surface of top cowling member 30, the internal wall portion is 184, the air flow space is 180 and 182, the partition is 188, the second airflow space is 180, the first air flow space is 182, second airflow space 180 communicates with the engine, the first duct is 210, the second duct is 204, and as is shown in figure 7, the bottom of the second duct 204

Art Unit: 3617

communicates with the cavity and is positioned higher than a bottom opening of the first duct 210.

The coupling end of claim 19 is 206 of figure 7.

The seal member of claim 20 is 72 of figure 7.

4. Claim 28 is rejected under 35 U.S.C. 102(b) as being anticipated by Hashimoto. The external wall portion is 27, the internal wall portion is the top of portion 22, and the cooling fin 44 projects into the airflow space. Both cowling 22 and wall portion 27 are made of plastic which is a nonferrous material.

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 1-6, 9, 10, 12, 13, 15, 25 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Furukawa in view of Nozawa et al.

In Furukawa the engine is 5, the cowling is 1, the first inlet port is 22, the second inlet port is adjacent inlet port 22 at the bottom end of partition 20, the outlet port is 29a, and the partition that separates the air that has entered through the second inlet port from the air entering the first inlet port is 20.

Art Unit: 3617

Furukawa does not disclose the cowling being of nonferrous metal aluminum. Nozawa et al discloses the cowling as being made of aluminum. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to make the whole cowling of Furukawa of aluminum as taught by Nozawa et al because aluminum is a light metal which resists rust.

In Furukawa the bottom cowing member is 2₁ and the top cowling member is 3.

The external and internal wall portions of Furukawa define airflow spaces 21 and 29 and the internal wall portion has an un-numbered projection to the left of the flywheel in figure 1 extending into space 29.

With regard to claim 6, claim 6 is a product by process claim. Determination of patentability of a product by process claim is based on the product itself. If the product of a product by process claim is the same as the product of the prior art, the claim is unpatentable. See MPEP 2113. In this instance, the cowling of claim 6 is the same product as the cowling of Furukawa as modified by Nozawa et al.

Air entering inlet 22 of Furukawa communicates with the engine through space 21.

The baffle of claim 10 is the end of the wall forming duct 24 of Furukawa.

Air flow space 29 is atop the cowling of Furukawa.

Art Unit: 3617

With regard to claim 13, duct 24 of Furukawa provides the descending and ascending ducts.

Claim 15 is met by the location of the second inlet port and the outlet port of Furukawa.

The atmospheric air passage way of claim 25 is 29 of Furukawa.

The ducts of claim 27 are formed by spaces 21 and 4 of Furukawa.

- 7. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Furukawa and Nozawa et al as applied to claim 1 above, and further in view of Haman.

 Furukawa does not disclose the body of the cowling as being a die cast piece.

 However, Haman teaches die cast aluminum cover portions 18 and 20. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to make the body of the cowling of Furukawa as die cast aluminum in view of the teachings of Haman. This allows for making the cowling in a mold process which reduces the cost of making the cowling.
- 8. Claims 8, 11, 21, 22 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi et al in view of Nozawa et al.

In Takahashi et al the cowling is 28,30, the first inlet is one of inlets 190, the external wall portion is the upper surface of cowling portion 30, the internal wall portion is 184,

Page 5

Page 6

the airflow space is 180, 182, the projection seals with the top of partition 188, the partition is 188, the first airflow space is 180, the second airflow space is 182, the second inlet port is 210, the outlet port is 192 and atmospheric air through 196 enters the second airflow space through the second inlet port and exits to an external location

of the cowling through the outlet port.

Takahashi et al does not disclose the cowling including the internal wall portion as being made of nonferrous metal. Nozawa et al discloses his cowling as being made of aluminum. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to make the whole cowling of Takahashi et al, including the internal wall portion, of aluminum as taught by Nozawa et al because aluminum is a light metal which resists rust.

With regard to claim 11, the second airflow space is 180 and the first airflow space is 182, the first duct is 210, the second duct is 204, and the bottom opening of the second duct 204 is higher than the bottom opening of the first duct 210 as is shown in figure 7 of Takahashi et al.

With regard to claim 21, the first and second inlets ports are 190 and 190, the outlet port is 192 and the partition is 188 all of Takahashi et al.

The member of claim 22 is cover 186 of Takahashi et al.

Art Unit: 3617

9. Claims 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi et al and Nozawa et al as applied to claim 21 above, and further in view of Hashimoto.

Page 7

Takahaski et al does not disclose at least one cooling projection extending from the body into the airflow space. Note the cooling projections 44 of Hashimoto. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to provide projections similar to 44 of Hashimoto between inlet ports 190 and ports 204 of Takahashi et al.

Motivation is to create a tortuous air flow path to eliminate water.

With regard to claim 24, claim 24 is a product by process claim. Determination of patentability of a product by process claim is based on the product itself. If the product of a product by process claim is the same as the product of the prior art, the claim is unpatentable. See MPEP 2113. In this instance, the cowling of claim 6 is the same product as the cowling of Takahashi et al. as modified by Nozawa et al. and Hashimoto.

10. Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Furukawa in view of Hashimoto.

In Furukawa the first inlet port is 22, the second inlet port is adjacent inlet port 22 at the bottom of partition 20, the outlet port is 29a, and the partition is 20.

Art Unit: 3617

Furukawa does not disclose at least one cooling fin projecting into the airflow space..

Page 8

Note the cooling fins 44 of Hashimoto projecting into the airflow space. It would have

been obvious at the time the invention was made to a person having ordinary skill in the

art to which said subject matter pertains to provide fins similar to 44 of Hashimoto within

air space the airspace of Furukawa.

Motivation is to create a tortuous air flow path to eliminate water from flowing into inlet

port 22.

Fins 44 can extend from tray 21 of Furukawa which forms part of the body.

Response to Arguments

11. Applicant's arguments with respect to claims 1-13 and 15-28 have been considered but are most in view of the new ground(s) of rejection.

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sherman D. Basinger whose telephone number is 571Art Unit: 3617

272-6679. The examiner can normally be reached on Monday through Friday, 5:30 a.m. to 2:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samuel J. Morano can be reached on 571-272-6684. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sherman D. Basinger Primary Examiner

Art Unit 3617

Wednesday, August 24, 2005

Art Unit: 3617

Page 10